

What is claimed:

1. An assay for the presence or amount of an analyte in a sample comprising
 - a) combining in solution the sample to be assayed for the presence or amount of analyte; a ligand that binds the analyte in solution; a first substrate, a second substrate, and a scavenger compound; wherein
 - the analyte has a first enzymatic activity that acts on said first substrate to produce a colorless first product;
 - the ligand is directly or indirectly bound to an enzyme with a second enzymatic activity that acts on the second substrate to produce a colorless second product;
 - the scavenger compound is a scavenger for the first product or the second product;
 - the first product and the second product chemically combine to produce a colored reaction product; and,
 - the first enzymatic activity is a hydrolase activity or an oxidase activity and the second enzymatic activity is a hydrolase activity if the first enzymatic activity is an oxidase activity and is an oxidase activity if the first enzymatic activity is a hydrolase activity;
 - b) detecting the production of the colored reaction product; and
 - c) relating the production of the colored reaction product with the presence of analyte in the solution.
2. The method of claim 1 wherein the first enzymatic activity is a hydrolase activity.
3. The method of claim 1 wherein the first enzymatic activity is an oxidase activity.

4. The method of claim 1 wherein the scavenger is 3-amino-1-(2,4,6-trichlorophenyl)-2-pyrazolin-5-one or acetoacetamide.
5. The method of claim 4 wherein the scavenger is 3-amino-1-(2,4,6-trichlorophenyl)-2-pyrazolin-5-one.
6. The method of claim 4 wherein the scavenger is acetoacetamide.
7. The method of claim 1 wherein said ligand is an antibody or a lectin.
8. The method of claim 7 wherein said ligand is an antibody.
9. The method of claim 1 wherein whichever of the first and second substrate is the substrate of the hydrolase activity is a compound that comprises a benzene ring or naphthalene structure with one active hydroxyl group.
10. The method of claim 9 wherein the substrate is 1-naphthol phosphate or phenyl phosphate.
11. The method of claim 3 wherein the whichever of the first and second substrate is substrate of the hydrolase activity is selected from the group consisting of N,N-dimethyl paraphenylene diamine; N,N-diethyl paraphenylene diamine; N-phenyl paraphenylene diamine; N'-ethyl-N'-ethyl-(2-methylsulfonamidoethyl)-2-methyl-1,4-phenylene diamine; 4 amino antipyrène; and N,N-dimethylamino benzidine.
12. The method of claim 11 wherein the substrate is N'-ethyl-N'-ethyl-(2-methylsulfonamidoethyl)-2-methyl-1,4-phenylenediamine.
13. The method of claim 1 wherein the hydrolase activity is selected from the group consisting of a phosphatase, an esterase, a galactosidase, a lipase, a glucuronidase, an amidase, a peptidase, and a sulphotase.

14. The method of claim 3 wherein the oxidase activity is a pseudoperoxidase activity.
15. The method of claim 14 wherein the analyte is glycated hemoglobin.
16. The method of claim 15 wherein the solution comprises non glycated hemoglobin and the glycated portion of hemoglobin to be compared to total hemoglobin.
17. The method of claim 15 wherein the ligand is an organic boronic acid compound directly or indirectly conjugated to a hydrolase.
18. The method of claim 1 wherein whichever of the first and second substrate is the substrate of the oxidase activity is selected from the group N,N-dimethyl paraphenylene diamine; N,N-diethyl paraphenylene diamine; N-phenyl paraphenylene diamine; N'-ethyl-N'-ethyl-(2-methylsulfonamidoethyl)-2-methyl-1,4-phenylene diamine; 4 amino antipyrine; and N,N-dimethylamino benzidine,
whichever of the first and second substrate is the substrate of the hydrolase activity is naphthyl phosphate or phenyl phosphate, and
the scavenger is 3-amino-1-(2,4,6-trichlorophenyl)-2-pyrazolin-5-one or acetoacetamide.
19. The method of claim 18 wherein the substrate of the hydrolase activity is naphthyl phosphate or phenyl phosphate and the substrate of the oxidase activity is N'-ethyl-N'-ethyl-(2-methylsulfonamidoethyl)-2-methyl-1,4-phenylenediamine.